

This is in response to the MMS request for comments regarding alternate energy –related uses on the OCS. It is my understanding that this is an advanced notice of proposed rulemaking for a regulatory program to implement section 388 of the Energy Policy Act of 2005. Alternate Energy-Related uses in the Outer Continental Shelf (OCS). The Energy Policy act of 2005 amended section 8 to authorize the Department of Interior to grant lease, easements, or rights of way on the OCS for development and support of energy resources from sources other than oil and gas. This request for comments is on the DOI, MMS to develop by Mid 2006 a comprehensive program and regulation to implement the new authority.

Your public notice process leaves something to be desired. It took me two hours to find this news release on your web page and I knew what I was looking for. A news release such as this that could impact the entire coastline of the nation should have a prominent position on you home page of your web page or a link on the home page to this page. If one of your goals is to “ensure consultation with affected states and local governments and provide a fair return to the United States for access to the OCS, then you should get the states and local governments involved in this process now. Have you contacted New York and Massachusetts directly with this news release the two states with alternate Energy proposal on the Outer continental shelf directly with this news release?

The one proposal in New York has been advertised by the United state Army Corps of Engineers in August. Please review all the 1,000 or so comments associated with that controversial proposal to obtain comments regarding the five major areas integral to the regulatory program. (see attached document for comments on each category.

- Access to the OCS lands and resources- contact the land owner, in the case of the New York proposed project it is the state park and two town parks. The biggest issue to worry about is, have sufficient alternative locations been evaluated including decentralizing the power generation? I worry that the fact that the outer continental shelf is federally owned and thus likely to have a token or minimal lease, make the area more economically attractive to power industry. The regulations would have to ensure that the lease environmental damaging alternative is selected regardless of cost. In addition the mountains have higher wind capacity and yet the two wind power generation farms have been proposed very close the 3 miles limit from the shoreline. If nothing else the lease should cost as much as a land lease would to deter the economic incentive or establish real costs for the externalities not normally accounted for in the costs such as diminished Vistas, oil leaks from mechanical equipment, noise etc. With proper accounting of externalities we can maybe avoid the tragedy of the commons.
- Environmental information, management and compliance- the New York site is adjacent to a New York state designated significant wildlife area, to include endangered plovers and least terns. USFWS should be integral in the proposed rule making for coastal areas. Being that these technologies are new and the placement of these technologies on the OCS have not been done in this environment before, significant feasibility studies and a detailed EIS for each specific project would need to take place prior to the irretrievable commitment of this resource occurs. Will the variable wind significantly affect the turbine by underperforming? The power equation is dependant on wind to the 3rd power, so if the wind half's then the power delivered divides by 8. Will the mechanical equipment rust in the salty sea spray and cause significant noise. Will the noise, even not audible to the human ear, impact wildlife behavior?
- Operational activities and Payments and revenues- The proposed power supplier should be required to be located within the state so that taxes can be collected by the state that is bearing the external cost of losing resources. Plus in the proposal to date, a Florida Company is proposing to manage a New York power plant. This is quite a distance and the power provider has less of a stake in balancing the environment with their commerce. There is a propensity for the tragedy of the commons. If the Capital system installed underperforms will the company abandon the system in place? There should be bonding

required for the de-installation of the system so 10 or 20 years down the road when the company is bankrupt, the no longer used system can be dismantled.

- Coordination and consultation- Many populations will be impacted by the industrialization of the outer continental shelf. Many of these are small and not well organized like commercial fisherman. Perhaps having a commercial fisherman, who has intrinsic knowledge of the resources he relies on a review committee can help assure that this population is well represented and that all resources are accounted for.

I have attached my specific comments to this PN and to the proposed New York Alternative Energy project proposed to be located on the shores of Fire Island inlet and significant habitat for Piping plover. Since the Department of Interior is the lead I would hope that you engage the Fish and Wildlife Services as part of the rulemaking team. In order for the MMS to act as a trustee for the environment for succeeding generations per NEPA, significant thought has to be provided for determining alternatives to blighting our beautiful seashores and natural heritage with industrial windmills that can be placed in mountain passes for more wind power. I am all for renewable sources of power, but they are designed to be incremental and non intrusive with their small KW out put, not designed to have 40 to 100 windmills placed in one area to replace MW generating fossil fuel plants.

FORMER COMMENTS TO ARMY CORPS PN :

US Army Corps of Engineers
New York District
Attn: LIPA Offshore Wind Park Application
26 Federal Plaza, Room 1937
NY, NY 10278

Re: PN # 2005-00365-L4

Dear permit reviewer:

This letter is in response to the public notice regarding the off shore wind farm proposed at Jones Beach island. I am opposed to the proposed siting of the wind turbine farm as it is in direct conflict with the existing use of the adjacent land. The land is a state and federal park used by boaters, and recreational bathers. It is a beautiful beach that is available to over 8 million people living in Manhattan and 6 million people living in Long Island and is Long Island's most valuable resource. There are many private beaches in Long Island that do not allow access to the general public. This is one beach that is State run and available to anyone who has the \$8 parking fee. Placing an industrial electrical generating facility that includes forty 424 foot towers with 26 miles of underwater cable in a 8 square mile area is in direct opposition of its current use as serene open space.

I have reviewed the proposal including the siting assessments and the proposal does not appear to be complete. The siting assessments are a one sided theoretical discussion of the capability of using off shore wind turbines without discussing the potential negative impacts in sufficient detail. It seems to be more of a business proposal or a sales pitch

than a full and fair evaluation of the all impacts positive and negative and a cost benefit analysis with sufficient alternatives discussed.

The LIPA work description provided in the public notices state that the purpose and need for the project is to contribute to growing electric need, comply with the independent system operator and provide clean renewable energy source. These criteria can be met with other less imposing technologies such as fuel cells, photovoltaic cells or gas generated microturbines or it can be met with wind turbines located on land at already industrialized land such as the closed Grumman plants, that will likely become brown fields, or the closed \$5.5 billion Shoreham nuclear power plant that Long Island electrical rate payers are still paying for with an average kw/hr rate that is 5 to 10 cents higher than the rest of the country.

Independent system operators can provide distributed generation located on land. The intention of independent system operators is to provide smaller distributed generation plants rather than the large power plants seen in the past. The proposal in the public notice appear to be an attempt to produce the equivalent to a large 100 MW generating station with its forty 3.6 MW wind turbines and a substation located in the water off shore of a highly used recreational area. It in effect creates an industrial facility off the shores of a beautiful, ecologically sensitive area and does not make sense.

The only reason I can imagine that this site has been selected is that it is located in federal waters and as thus is not owned by any one person so there will be no lease and thus no landlord for the independent system operator to pay money to. This represents a taking of public lands that are currently shared by the public for public use and allows FPL, an independent system operator, to make a profit by using public lands and is reprehensible.

The impacts of the proposed plan have not been fully evaluated and would require a full environmental impact. The phase 2 site assessment states that meteorological measurements using a tower sited within the proposed facility may be included in the engineering design. Has this been done? Since this is a relatively new application in this nation for an emerging technology, it would make sense that the site could not be selected without evaluating the winds. With wind power it is difficult to estimate the power generated because the Power is dependent on the wind speed cubed. $\text{Power (KW)} = \text{constant} \times (\text{diameter})^2 \times (\text{wind speed})^3$. This means that the power generated is based on two constant figures and one variable, the wind speed. If the wind speed were reduced by half, the power would be reduced by 1/8. It makes it very difficult to properly estimate the power generated. The best sites are sites with constant wind speed with little variation. Ocean breezes tend to gust significantly and thus would require a meteorological study at the proposed location to prove that the estimated power generation can be met.

Since this is an emerging technology and admittedly a new application off shore, why is there no pilot study or feasibility study proposed? The impacts of one wind turbine located off shore, let alone a wind farm of 40 wind turbines and generators with 26 miles of cable could not be known. Some of the concerns are:

- Variable ocean wind effect on the power output of the selected make and manufacturer of the rotor and generator
- Reliability of the selected equipment and performance in the salty and wet environment which is not ideal for mechanical equipment
- Electric magnetic fields potentially produced by the 26 miles of underground current in a confined 8 square mile area and its impacts on benthic and ocean organisms
- EMF disruption of radio transmissions
- Noise, Other nations are having problems with low frequency thumps of the blade passing the turbine tower, the UK spends money researching the sub near continuous noise that is disturbing to people, what impact will noise have on breeding and foraging endangered shorebirds. Noise levels cannot be predicted as winds tend to carry noise and it bounces off of structures. How will 40 turbines interact with each other? New Zealanders have found that wind turbine generator may produce noise below audible ranges in the infrasound and ultrasound range. In Denmark, the government is buying back property down wind of wind farm locations due to noise complaints.
- Birds flying into the rotors- the Great South Bay located just behind the proposed windfarm area is a popular bird breeding and foraging area. The area in question attracts a wide variety of birds.

What impact do you think the wind farms will have on the revenues of the State park. Has a formal survey been conducted to determine the impact that the unsightly wind turbine industrial facility will have on the recreational users? Has the applicant evaluated the number of patrons of Robert Moses Beach, Gilgo Beach and Cedar Beach? If half of those patrons did not like the new industrialized view, and revenues reduced by half, would the State, and town beaches be able to support themselves? Being that the applicant is a Florida company that plans on operating the system with only a small office nearby, I expect that they do not understand the large amount of users of this beach.

Are all the negatives like loss of open vistas in a highly urbanized area without much open space left, noise disturbance to humans and shorebirds, included in the cost benefit analysis? How have the applicant quantified these items in the cost to benefit analysis? Have sufficient alternatives been fairly evaluated, such as utilizing Brownfield's, or farm lands in less populated areas and other technologies with less impact? More studies need to be performed to recognize the full impact these generators will have on the local resources. If the wind farm becomes unprofitable, and the independent system operator abandons it, will there be money to remove the equipment? I recommend requiring a bond for the de-installation.

Sincerely,

Patricia Donohue